

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1 – 42. (Canceled)

43. (New) A method of calibrating a device having a first fluid source that ejects a first drop quantity and a second fluid source that ejects a second drop quantity, comprising:

printing a pattern having a first portion and a second portion, wherein the first portion is printed by the first fluid source and the second portion is printed by the second fluid source;

obtaining a drop volume relationship between the first drop quantity and the second drop quantity from the pattern; and

adjusting data used to determine quantities of fluid to eject from the first fluid source or the second fluid source based on the relationship between the first drop quantity and the second drop quantity.

44. (New) The method of claim 43, further comprising: determining whether a ratio between the first drop quantity and the second drop quantity deviates from a specified ratio.

45. (New) The method of claim 43, further comprising: scanning the pattern to obtain a signal response, wherein the obtaining step obtains the drop volume relationship between the first drop quantity and the second drop quantity based on the signal response.

46. (New) The method of claim 45, wherein the signal response includes a first portion response and a second portion response, and wherein the obtaining step obtains the drop volume relationship by comparing the first portion response with the second portion response.

47. (New) The method of claim 46, wherein the obtaining step comprises:
determining an intersection point between a calculated value of the first
portion response and the second portion response; and
determining the fill density of the first portion at the intersection point.

48. (New) The method of claim 47, further comprising:
creating a fit line along at least a part of the signal response of the test portion;
and
adjusting the intersection point to an intersection between the fit line and the
calculated value of the reference portion response.

49. (New) The method of claim 46, wherein the first portion has a fixed fill
density and the second portion has a varying fill density.

50. (New) The method of claim 49, wherein the obtaining act comprises:
determining a fill density of the second portion corresponding to a fill density
of the first portion; and
calculating the second drop quantity from the fill density of the second
portion.

51. (New) The method of claim 43, wherein the pattern further comprises at
least one selected from the group consisting of a spit bar and a light absorbing portion.

52. (New) A method comprising:

printing a test pattern having a reference portion and a test portion, wherein the reference portion is printed by a first fluid source and the test portion is printed by a second fluid source;

obtaining a drop volume relationship between a first drop volume of the first fluid source and a second drop volume of the second fluid source from the test pattern; and

adjusting at least one value in a color map using the drop volume relationship between the first drop volume and the second drop volume.

53. (New) The method of claim 52, further comprising: scanning the test pattern to obtain data, wherein the obtaining step obtains the drop volume relationship between the first drop volume and the second drop volume from the test pattern based on the data.

54. (New) The method of claim 53, wherein the data includes reference portion data and test portion data, and wherein the obtaining step obtains the drop volume relationship by comparing the reference portion data with the test portion data.

55. (New) The method of claim 54, wherein the obtaining step comprises:

determining an intersection point between a reference line determined from the reference portion data and the test portion data; and

determining the fill density of the test portion at the intersection point.

56. (New) The method of claim 55, wherein the test line is fit to at least a part of the test portion data; and determining the intersection point includes determining an intersection between the fit line and the reference line.

57. (New) The method of claim 54, wherein the reference portion has a fixed fill density and the test portion has a varying fill density.

58. (New) The method of claim 57, wherein the obtaining step comprises:
determining a fill density of the test portion substantially equal to a fill density
of the reference portion; and
calculating the second drop volume from the fill density of the test portion.

59. (New) The method of claim 52, wherein the test pattern further comprises
at least one selected from the group consisting of a spit bar and a light absorbing
portion.

60. (New) A calibration apparatus for a device having a first fluid source that
ejects a first drop volume and a second fluid source that ejects a second drop volume,
comprising:

means for scanning a test pattern having a reference portion and a test portion
and generating a sensor output, wherein the reference portion is printed by the first
fluid source and the test portion is printed by the second fluid source;
means for obtaining a drop volume relationship between the first drop volume
and the second drop volume from the test pattern; and
means for changing a color map using the drop volume relationship.

61. (New) The calibration apparatus of claim 60, wherein the scanning means
includes means for illuminating the test pattern.

62. (New) The calibration apparatus of claim 60, further comprising:
means for determining a fill density of the test portion corresponding to a fill
density of the reference portion; and
means for calculating a drop volume from the fill density of the test portion.